

How Hurricane Katrina affected the natural environment

Hurricane Katrina

Hurricane Katrina had a huge impact on the coastal areas of Louisiana, Mississippi, Florida and that it passed over. The southern coastal areas experienced rough seas, strong winds, heavy rain and 'modest' storm surges as Hurricane Katrina passed.

Winds gusting up to 266km/hr raced across the southern states of the USA uprooting trees and tossing branches, rocks and debris around. Although very strong winds were responsible for much of the damage with Katrina, flooding and mudslides were also possible due to heavy rainfall. The destruction of coastal vegetation from the strong winds left areas vulnerable to coastal erosion.

Torrential rain pounded the southern states up to 400 millimetres in some parts of Louisiana. The first area of rainfall occurred over the open waters of the Gulf of Mexico, as the storm was intensifying from a Tropical Storm to a Category 2 cyclone.

Storm surges rolled over the low lying areas, flooding them with up to 3.5-4 metres of salt water. This killed salt intolerant plants and seeped down to contaminate aquifers. As a result of the rainfall and storm surge the level of Lake Pontchartrain rose and caused significant flooding along its north-eastern shore.

Flooding occurred as a result of the rainfall and the storm surge. The storm's damage was concentrated over an area including the Bahamas, South Florida, Cuba, Louisiana (especially Greater New Orleans), Mississippi, Alabama, Florida Panhandle, most of eastern North America

Enormous waves are thought to have severely eroded coastal areas all along the southern coast. Hurricane Katrina generated wave heights of up to 11metres which crashed onto the southern coast causing coastal erosion.

As the cyclone passed on, winds and rains eased, sea levels fell and waves became less ferocious.